

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE ER REGULATORY CONTACT RECORD

Date/Time: 8/11/05 4:00

Site Contact(s)/Phone: Karen Wiemelt, Annette Primrose, Norma Castaneda

Regulatory Contact/Phone: Larry Kimmel, Harlen Ainscough, David Kruchek

Agency: EPA CDPHE CDPHE

Purpose of Contact: North Firing Range Final Configuration

Discussion

As described in the SAP Addendum for PAC NW-1505 - North Firing Range, the firing range was constructed in 1983 and upgraded in 1993 to a covered, ricochet proof structure. The principal firearms used at the range were pistols and rifles, but machine guns up to 0.50 caliber and shotguns were also fired. Shotgun practice was confined to target shooting at paper silhouettes, no clay pigeons were used. The range floor was rinsed with 200 to 300 gallons of water several times a year. This water and any precipitation exited the range to the east through a culvert under the northeastern corner of the berm. This culvert, and associated soil contamination, was removed as part of the recent accelerated action.

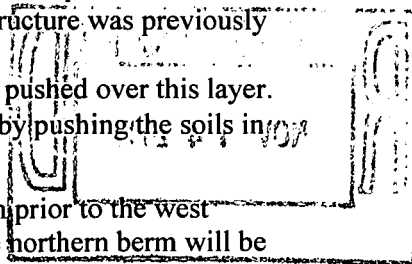
Between 1983 and 1993, bullets were caught in soil on the south face of the north berm. The east and west facing berms were not utilized as backstops. Soil was removed from the south face of the north berm during upgrades in 1993. Bullets were disposed as waste during this activity. By 1993, the upgraded firing range utilized a bullet trap to prevent bullets from impacting the environment. Sampling and remediation of soil with elevated lead concentrations, based on WRW Action Levels for lead (1,000 mg/kg), was recently completed.

Based on both the historic information and analytical data, final configuration of this area will be a low mound created by pushing the berms into the center of the range. The height of the mound will be about 10 feet above the surrounding grade. The highest potential for remaining bullet fragments is at the south face of the north berm, previously used as the backstop, and along the toe of the other berms, where there is the potential for fragments to be present from structure removal or floor rinsing. This information was corroborated during removal of the culvert in the northeast corner of the Firing Range. During this evolution, a trench the entire width and depth of the berm was excavated. Bullet fragments and shells were only noted at the culvert itself, not within the berm.

Therefore, the sequence for creating the mound at the North Firing Range will be as follows:

- Scrape approximately one foot from the inside faces of all of the berms and place on the lower soil within the berms of the NFR, where the NFR Shoothouse structure was previously located. This material will be placed along the toe of the berms.
- The north berm, located in the direction that bullets were fired, will be pushed over this layer.
- The west berm will next be pushed over top of this material, followed by pushing the soils in the east berm over all.

If field conditions indicate that it would be preferable to push the east berm prior to the west berm, then this can be done with no additional notifications. However, the northern berm will be



placed immediately following placement of the scraped surfaces of the berm (see attached sketch).

Due to previous remediation activities, the north main berm is not expected to contain significant quantity of bullets or bullet fragments, or lead contamination. Based on historical knowledge, the east and west berms are not expected to have been impacted by site activities. As an added assurance, the north berm will be placed beneath the east and west berm soils.

During berm movement and after final configuration is complete, the area will be inspected to verify that bullets and fragments are not at the surface. If significant amounts of bullets or fragments are observed during berm movement, then work will pause and the Regulatory Agencies will be consulted to determine the most appropriate approach. It is anticipated that small quantities of bullets or fragments (less than one cup), will be picked up and appropriately dispositioned.

After final placement of the soil, grid sampling on 100-foot centers will be performed in accordance with the IABZSAP. Samples will be analyzed offsite by XRF. These data will be mentioned in the uncertainty analysis for the risk assessment, but not used within the risk assessment.

Contact Record Prepared By: Annette Primrose

Required Distribution:

M. Aguilar, USEPA
H. Ainscough, CDPHE
J. Berardini, K-H
B. Birk, DOE-RFPO
L. Brooks, K-H ESS
G. Carnival, K-H RISS
N. Castaneda, DOE-RFPO
C. Deck, K-H Legal
N. Demos, SSOC
S. Garcia, USEPA
S. Gunderson, CDPHE
S. Johnson, K-H ESS
M. Keating, K-H RISS
L. Kimmel, USEPA
D. Kruchek, CDPHE

D. Mayo, K-H RISS
S. Nesta, K-H RISS
L. Norland, K-H RISS
E. Pottorff, CDPHE
A. Primrose, K-H RISS
M. Roy, DOE-RFPO
R. Schassburger, DOE-RFPO
S. Serreze, K-H RISS
D. Shelton, K-H ESS
C. Spreng, CDPHE
S. Surovchak, DOE-RFPO
J. Walstrom, K-H RISS
K. Wiemelt, K-H RISS
C. Zahm, K-H Legal

Additional Distribution:

Robyn Blackburn/EPA/USFWS
